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Quality of Life in Nurses; Case Study of Shahid Beheshti Hospital of Kashan City, Iran

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ABSTRACT

Aims Nurses are the greatest group of healthcare system service providers and lack of sufficient attentions to their quality of life will lead to the challenge of their service providing. The present study was designed to evaluate the quality of life in all nurses of different wards of a Hospital in Kashan City, Iran.

Instrument & Methods This cross-sectional descriptive study was carried in all nearly 500 nurses of Shahid Besheshti Hospital of Kashan City, Iran, in 2015-2016. Sampling was done at all different wards of the hospital and 200 nurses were selected randomly. Data was collected by the standard version of Quality of Life and Short Form of Health Survey. The collected data was entered into the SPSS 16 software and were analyzed using descriptive statistics and independent T test.

Findings There were no significant differences in physical health, mental health, environmental health, social communications and the quality of life according to nurses wards but significant differences were observed between the scores according to their position and working shift. There were significant differences in the status of mental and physical health according to gender (between males and females), marital status (between singles and marrieds) and employment status.

Conclusion The status of nurses' quality of life is moderate in Shahid Beheshti Hospital of Kashan and it has relationship with work shift, position and workplace.

Keywords Quality of life; Nurses; Hospitals

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Introduction

Nurses play an important role in healthcare service providing by paying attention to healthcare and sanitation quality, training the community, managing the healthcare system, and improving the quality of life of patients. However, problems such as shortage of staff numbers, workload and long hours of work are challenges of nurses' service providing to patients [1].

According to WHO, there are 6 elements for the quality of life; physical health, mental status, independence level, social communications, environmental communications, and intellectual interests [2]. Nurses are the greatest providers of healthcare services [3] and are subject to job burnout and their quality of life are influenced by above mentioned factors [4]. In fact, the level of community health is somehow founded by nurses' activity [5]. The quality of life level in addition to physical, psychological and social health concepts perceived by different individuals are concerned as the key indicators for the individual satisfaction level from life [6]. Quality of life is a concept beyond the burdens of physical health, whereas it is a critical index which its independent measurement is necessary in different researches as an effective result [7]. Quality of life measurement is known as the first step to plan effective interventions to improve the health level [8].

With respect to the fact that human resource is the most important and substantial element of each organization and success of each organization to achieve its targets depends on its human resource performance, attention to mental and physical needs of the staff is necessary to meet the goals and should be considered as a key element for the organizations. Therefore, it seems necessary to evaluate quality of life and job life in healthcare centers in order to use the staff potential capabilities to provide appropriate and more suitable services to the patients and other people through determination of the associated factors [9].

In the viewpoint of medical sciences, quality of life is defined as the quality in relationship with health: one's perception of health status, health care, and health improvement activities, which leads to a general level of activity and allow them to follow their

valuable targets of life [3]. In the present study, quality of life means evaluation of a person's health level in physical, mental, communicational and environmental viewpoints. Measurement of individual perception, perception of their health level and evaluation of the suitability of health care services and medical interventions and also utilization of proper health care services are determinants for this purpose [10]. In addition, quality of life is the sense of satisfaction and luckiness of life and is associated to the elements like age, culture, gender, education level, social class status, and social environment [11].

Studies on quality of life in health care centers' staffs in Iran are still limited [6]. Health care staffs of Sabzevar City, Iran, have reported 20% low, 64% moderate and only 15% desirable level of quality of life on physical conditions and the average score of men was significantly higher than that of women [6]. In another study in Tehran University of Medical Sciences' hospitals, a significant relationship was observed between executive responsibility and quality of life of the community, however, there seemed no significant relationship between marital status, age, gender, education level and type of the hospital and the quality of life, generally or in particular [11]. In another inclusive study in a national level, quality of life was evaluated for nurses of 17 provinces of Iran. The studied nurses pointed out the necessity of workplace health and expressed their satisfaction of their moderate quality of life [12].

So far, research studies have been conducted on quality of life and various instruments have been designed to specifically or generally evaluate it. An overview of studies in this area indicates that the physical health and physical environment had the lowest and highest rates in nurses' quality of life, respectively. In fact, nurses often play several simultaneous roles in their family and the society. Consequently, they are exposed to many different physical and emotional challenges such as fatigue, insomnia, and emotional problems, which can result in an overall reduction in their quality of life. Furthermore, as night shifts and the consequent sleep deprivation is an inextricable part of the duties of many nurses, there is a real concern that nurses may be affected by some degree of different sleep

deprivation related ailments. Furthermore, long shifts may result in withdrawal from hobbies, entertainments and social activities, which can worsen their quality of life further [13-15].

Some studies have described Iranian nurses' occupational status in different dimensions. Mirzabeigi *et al.* have conducted a survey on job satisfaction involving 1,058 Iranian nurses and have demonstrated that only about 34% of nurses are satisfied with their job. The nurses have declared their professional duties, the methods of communication between nursing managers, and their social position as the main reasons for job dissatisfaction [16]. Shoghi *et al.* have reported 87% of verbal abuse and 27% physical violence in studying 1317 nurses, during a 6-month period [17]. Also, 55% of nurses have reported moderate stress levels related to occupational issues and there was a significant association between stress level and job satisfaction [18]. A large number of studies show that nurses, doctors and all hospital or healthcare staff suffer from occupational stress and their life is influenced by this factor. Moreover, quality of life in nurses working in different wards of hospitals is also different [15-19]. In another study, almost $\frac{2}{3}$ of nurses of Tehran University of Medical Sciences' hospitals have expressed their dissatisfaction of quality of life [20].

At present, quality of life is considered as one of the challenges for sanitation and healthcare experts known as an index to measure the health status in healthcare researches. The aim of life study and its results is to enable individuals to live more enjoyably and meaningfully [21].

Since there has been no study on the quality of life of Kashan University of Medical Sciences' health centers and hospitals, this study was designed to gather a base knowledge to do interventions for higher quality of life with the purpose of doing duties in a higher satisfaction level at the society. The present study was designed to evaluate the quality of life in all nurses of different wards of Shahid Beheshti Hospital of Kashan City, Iran, during their working shifts in 2015-2016.

Instrument & Methods

This cross-sectional descriptive study was carried in all nearly 500 nurses of Shahid

Besheshti Hospital of Kashan City, Iran, in 2015-2016. Sampling was done at all different wards of the hospital. According to the prevalence level of 0.5, accuracy of 5% and significance level of 95%, the sample size was estimated 200 nurses. Considering at least 10% of loss, 300 samples were taken from the society randomly [22]. All the samples were free to participate in the research or not.

Data was collected by 2 questionnaires; the standard version of Quality of Life and Short Form (36 questions) of Health Survey (SF-36). The validity of the questionnaires were confirmed by different Iranian researchers and their reliability were calculated as 0.99 and 0.89 by Cronbach's alpha coefficient method [23]. A demographic questionnaire was also used to collect the information of the participants including gender, age, marital status, education, resume background, recruitment conditions, service workplace, and work shift.

SF-36 questionnaire has 4 brief measures; physical health (physical performance, limit, pain and general health scales), mental health (social performance, mental problems, mental health and happiness scales), environmental health, and social communications [23]. Except one question which evaluated individual variations in a person health status during a one-year period, the rest of the questions applied for calculation of eight scales scores. For some questions, the scores were re-codified such that all the scales obtained a one-direction scale. Score of each scale was varied from zero to 20 in which zero indicates the worst and 20 indicates the best status [23]. For each ward, one nurse was selected for distribution and collection of the questionnaires that had not any role on respondent comments. After preparation of all nurses list, 300 subjects were randomly chosen from training unit of the hospital (however, head nurse and training supervisor were selected by the author) and the questionnaire was delivered to them in their different work shifts accompanied with explanations about the questionnaire. After filling out the questionnaire, they were collected and analyzed. Those nurses who were working at the ward once distributing the questionnaires and wanted to participate in the study received them and those who were not present were removed. In order to

respect the ethical principles, purpose of the study was described for the participants and they were assured the questionnaires were anonymous and the finding data would be used only for the research goals.

The collected data was entered into the SPSS 16 software and were analyzed using descriptive statistics and independent T test.

Findings

212 out of 300 questionnaires returned from which 12 had 10% unanswered questions which were removed from the study and at last 200 complete questionnaires were studied. 171 nurses were male, 167 were

married and 146 were contractual. The mean age of samples was 33.1±5.3 years and their mean of working background was 9.8±7.3 years. There were no significant differences in physical health, mental health, environmental health, social communications and the quality of life according to nurses wards but significant differences were observed between the scores according to their position and working shift (Figure 1).

There were significant differences in the status of mental and physical health according to gender (between males and females), marital status (between singles and marrieds) and employment status (Figure 2).

Figure 1) The mean of studied parameters scores in nurses according to their wards, position and working shift

Parameters	Physical health	Mental health	Workplace health	Social communications	Quality of Life
Wards					
ICU	15.5±2.3	14.8±1.6	13.1±0.1	15.4±2.5	13.1±3.0
Cardiology	14.2±1.4	14.9±2.3	14.5±2.6	14.9±2.3	14.2±1.4
CCU	13.1±2.4	14.1±4.2	14.5±2.5	13.1±2.3	14.6±2.2
Obstetrics & Gynecology	15.6±1.3	12.9±1.6	13.1±0.1	12.9±2.6	13.1±2.5
Neonatal	12.1±2.8	13.2±2.4	15.1±3.7	13.1±1.7	12.1±2.8
Internal	14.6±4.4	14.5±1.4	13.5±1.9	15.0±2.3	14.7±2.9
Surgery	14.5±2.6	14.6±1.4	13.5±1.9	15.0±2.3	14.7±2.9
Dialysis	14.6±1.4	14.2±2.6	12.2±2.0	13.9±2.6	14.6±4.4
Emergency	14.2±2.3	13.6±2.4	12.9±2.6	12.7±1.5	13.1±2.4
p Value	0.001	0.01	0.001	0.001	0.01
Position					
Head nurse	14.9±2.2	14.1±2.5	13.1±2.0	15.1±2.9	15.4±1.9
Training supervisor	13.5±2.3	12.7±2.3	12.1±2.9	13.8±2.5	14.5±2.5
Clinical supervisor	15.0±1.3	13.5±2.1	12.1±2.4	14.0±3.1	13.2±3.2
Supervisor	14.4±2.5	12.8±2.8	11.5±2.3	13.5±2.5	14.1±3.1
Staff	14.6±3.5	13.7±3.0	11.1±1.3	13.1±2.9	15.1±1.3
General nurses	13.9±1.9	11.9±1.7	10.9±2.7	12.8±2.4	12.9±1.6
p Value	0.0001	0.001	0.001	0.001	0.001
Working Shift					
Fixed morning shift	15.0±2.3	12.5±2.2	11.5±3.2	13.4±3.1	15.2±2.4
Fixed afternoon shift	14.1±3.0	12.9±2.9	11.0±2.0	13.1±3.6	14.5±1.2
Fixed night shift	13.0±2.2	12.1±3.0	10.5±2.0	13.3±2.0	14.1±2.4
Rotation shift	13.4±2.5	13.0±2.4	10.9±2.5	12.5±3.0	15.4±1.9
p Value	0.0001	0.001	0.001	0.03	0.001

Figure 2) Comparison of physical- and mental health scores according to demographic variables

Parameters	Physical health	Mental health
Gender	Female	0.54±0.09
	Male	0.58±0.11
	p Value	0.01
Marital status	Single	0.61±0.07
	Married	0.57±0.12
	p Value	0.001
Employment status	Official/Contractual	0.49±0.10
	Contractual	0.57±0.09
	p Value	0.001

Discussion

As this study asserted, quality of life in nurses was evaluated moderate and the results were similar to those of Gholami *et al.* [24], Salemi *et al.* [25], Assariddi *et al.* [26] and Aghilinejad *et al.* [27] that obtained the level of job stress among the nurses of emergency room as high, which had led to their lower quality of life.

In physical point of view, highest and lowest scores have been reported for ICU and neonatal ward, respectively which may have caused by their lower physical activities in ICU and higher activity in neonatal ward [28]. The study results were not in accordance with Yazdimoghaddam & Estaji [29].

In environmental point of view, highest and lowest scores were reported for nurses working in neonatal and dialysis wards, which may stem from the necessity of hygiene and sterilization level in neonatal ward and unpleasant smell of dialysis ward. The results of the research were not in accordance with any similar studies. The relationship between female nurses and meaningful quality of life was reported higher than males for which a similar study [29] was in accordance with the present study results. The strongest relationship was observed between nurses' quality of life and emergency room, which was in accordance with the results of a similar study in Tehran [27]. The type and workplace of their services plays an important role in their level of stress and this stress was higher at emergency room, to which a larger number of patients refer. Study of Pflanz & Sonnek on 127 nurses of emergency ward have shown that there exists a higher job stress among these nurses [30].

Physical health of clinical supervisor was evaluated against other superior nurses confirmed in a similar study as per high physical activity which is a sort of exercise as well [31]. Physical and mental health of training supervisor of the hospital were measured low which may be rooted in great number of training regulations and change of training methods or processes which was in accordance with other studies as well [32].

Environmental health for the hospital staff was measured low, which may be due to the crowded and noisy atmosphere of the hospital and traffic of individuals and staff or university students and patients accompaniers or may stemmed from work

shift rotation of nurses which might result in dissatisfaction from the hospital environment especially at night [25].

Social communication of subordinated nurses was measured low which may be resulted from their difficult certain duties or their low independence level at work and may lead to their retreat and lack of attempts to improve their social interactions. These findings have been in accordance with another study findings [33].

Conducting researches in the field of quality of life for healthcare service providers, particularly the nurses may play an important role for the great plan of health revolution. Considering the nurses opinions about their work shift schedule, workplace and even the way of treatment of the patients influence their life quality and then their services. Training courses shall be hold in order to decline their level of dissatisfaction in providing services. Also, lower assignment of duties to the staff, employment of more human force during the peak work hours and also providing recreation or sport facilities for relaxation and rehabilitation, appropriate valuation in this field or bonus encourages persuading the staff to provide better services are the strategies for higher quality of life in nurses. Assessment of effective factors on nursing proficient such as lack of nurses, their time of work, job damages, service provision system, social perspectives and etc. can make a strong relationship with quality of life level.

At last, it seems that the results of the present study can help nurses and hospital directors to focus on improvement ways of quality of life and the provided healthcare services by the nurses as these can improve the procedure of treatment and tracking of the patients' status. However, this study which has assessed lots of variables in the field of nursing stress, reminds the necessity to conduct extensive researches along with larger population in order to identify the key factors of improvement of quality of life and plan the suitable revised plans to meet the needs associated with the plans.

In accordance with approach lifelong learning in training of the health professional, to acknowledge education understanding based on the quality of life awareness is a matter that should be dwelling on importantly in terms of the cost reduction of the health

spending as well. Employees in the process of lifelong learning, personal, behavioral, cognitive and emotional benefits they provide. Consequently, for quality of life, it is to improve to apply educational programs and sufficient staff in the departments. In service training, the social activity programs, rotation application, and by awarding policy can be applied to increase quality of life for reducing occupational hazard and workload.

The large number tasks assigned to the staff and necessity of the author presence in different work shifts can be defined as the limits of this study. Regarding some inevitable damaging factors in nursing occupation and the necessity of preventing physical, mental and behavioral consequences of stress on nurses, measures should be taken in order to develop their occupational environment and quality of life. Also, teaching oppositional methods to nurses is suggested. It seems that having some information such as this research will allow nurses and hospital administrators to focus on ways to improve quality of life in nurses and increase their quality of nursing care. The authors suggest further studies to analyze especially those variables that did not appear to be predictors, and that these professionals' triple role could influence their perception of their Quality of Life. Likewise, comparative gender studies could provide greater knowledge about this construct.

Conclusion

The status of nurses' quality of life is moderate in Shahid Beheshti Hospital of Kashan and it has relationship with work shift, position and workplace.

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